MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF DOD FIELD ACTIVITIES

SUBJECT: Department of Defense (DoD) Chief Information Officer (CIO) Guidance and Policy Memorandum No. 1-8330-052899 - Information Interoperability

It is the goal of the Department of Defense (DoD) to achieve Information Superiority in support of the warfighter and decision-maker. In order to achieve this goal the DoD must field interoperable information capabilities. This memorandum provides the policy guidance for achieving interoperable information capabilities.

The attached policy guidance for Information
Interoperability is effective immediately. It supersedes DoDD
4630.5 "Compatibility, Interoperability, and Integration of
Command, Control, Communications, and Intelligence (C3I) System,
November 12,1992", and DoDI 4630.8, "Procedures for
Compatibility, Interoperability, and Integration of Command,
Control, Communications, and Intelligence (C3I) Systems,
November 18, 1992". The Senior Civilian Official for the Office
of the ASD(C3I) has initiated action to cancel both of these
issuances, and will proceed to incorporate the attached policy
guidance into the DoD Directive System. A DoD Directive
containing this policy and DoD Regulation containing the
implementation of this policy will be issued after the normal
coordination process.

If you have any questions, please direct them to Mr. Jack Zavin in the Office of the Director for Information Integration and Interoperability. He can be reached at (703) 607-0238 or e-mail: jack.zavin@osd.pentagon.mil.

John Hamre Deputy Secretary of Defense

Attachment

Guidance and Policy for Department of Defense Information Interoperability

References:

- (a) DoD Directive 4630.5, 12 November 1992, "Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) System."
- (b) DOD Directive 5000.1, 15 March 1996, "Defense Acquisition."
- (c) DoD Regulation 5000.2-R, 15 March 1996, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs." (d) DoD Instruction 4630.8, 18 November 1992, "Procedures for Compatibility, Interoperability, and Integration of Command, Control, Communications, and Intelligence (C3I) Systems." (e) Chairman of the Joint Chiefs of Staff Instruction 3170.01, May 1999, "Requirements
- (f) DCI Directive 1/16, "Security Policy for Uniform Protection of Intelligence Processed on Automated Information Systems and Networks," 19 July 1998.
- (g) DCI Directive 1/1, "The Authorities and Responsibilities of the Director of Central Intelligence as Head of the U.S. Intelligence Community," 19 November 1998.
- (h) OSD Memorandum, "DoD Joint Technical Architecture Version 2.0", 30 November 1998.
- (i) OSD) Memorandum, "Strategic Direction for a DoD Architecture Framework", 23 February 1998.

1. PURPOSE

This Guidance and Policy Memorandum (G&PM) establishes Department of Defense (DoD) policy to enable the secure exchange and use of information necessary to the execution of the DoD mission. This issuance establishes policies, guidance, and assigns responsibilities to:

Generation System (DRAFT)."

1.1. Ensure information shall be available in a secure, timely, useable, understandable, and cost-effective manner to the warfighter and supporting activities, at anytime and

anyplace in times of peace, crisis, conflict, humanitarian assistance, and war.

1.2. Supersede references (a) and (d). Supplement references (b), (c), and (e).

2. APPLICABILITY

- 2.1. This guidance and policy applies to The Office of the Secretary of Defense, the Military Departments [and their respective Services], the Chairman of the Joint Chiefs of Staff and the Joint Staff, the [Unified] Combatant Commands, the Inspector General of the Department of Defense, the Defense Agencies, and the DoD Field Activities (hereafter referred to collectively as "the DoD Components").
- 2.2. This guidance and policy complies with public law and established DoD and Director Central Intelligence (DCI) Directives relative to interoperability, architecture, acquisition, and security policies and practices.

3. SCOPE

- 3.1. Any existing, change to an existing or new capability that produces, uses or exchanges information in any forms electronically.
- 3.2. All DoD Acquisition Categories and non-DoD 5000 series acquisitions that meet the criteria of paragraph 3.1. Pre-acquisition programs such as: Advanced Concept Technology Demonstrations (ACTDs), Advanced Technology Demonstrations (ATDs), Joint Warrior Interoperability Demonstrations (JWIDs), and Battle Laboratory projects that meet the criteria of paragraph 3.1.
- 3.3. Any interface external to DoD that produces, uses or exchanges information in any form electronically including, but not limited to, non-DOD intelligence organizations, foreign nations, multinational organizations (e.g. NATO) and industry.

4. DEFINITIONS

4.1. Architecture - The structure of components, their relationships, and the principles and guidelines governing their design and evolution over time. It is composed of three major perspectives, operational, systems, and technical views. (C4ISR Architecture Framework)

- 4.2. Capability Any information technology and National Security Systems (Public Law 104-106) that enables or supports the production, use, or exchange of information, in any form electronically.
- 4.3. Characterization of Information Interoperability Details of information transfer, information format
 and content, and information processing together with
 how the information is to be used.
- 4.4. Enterprise The Department of Defense (DoD) and the Intelligence Organizations who support the DoD.
- 4.5. Information Interoperability The condition achieved when information is electronically exchanged and used to enable the capabilities and/or users to operate effectively together.
- 4.6. Enterprise Solutions Standard applications and/or hardware/software/firmware components that are needed across the Enterprise to achieve a minimal level of security and information interoperability.

5. POLICY

It is Department of Defense policy that:

- 5.1. Information interoperability for capabilities meeting the criteria in paragraph 3 shall be: characterized using the architecture view products in accordance with the guidance in the C4ISR Architecture Framework as mandated by reference i; verified and maintained over the life cycle of the capability; and managed using an Information Interoperability and Integration Master Plan (C4I Support Plan with expanded coverage).
- 5.2. Architectures view products shall be consistent, synchronized and integratable across the Enterprise.
- 5.3. Capabilities shall use applicable Joint Technical Architecture (JTA) mandated standards. Use of an applicable JTA mandated standard must consider cost, schedule, or performance impacts. Only the Component Acquisition Executive or cognizant OSD authority can grant a waiver from the use of an applicable JTA mandated standard. All waivers shall be submitted to the Under Secretary of Defense (Acquisition and Technology)(USD (A&T)) and the DoD CIO for concurrence. (Reference (h))

- 5.4. A minimal set of enterprise solutions shall be identified, implemented, tested, and used to enable secure information interoperability across the DoD. Enterprise solutions shall become part of the DII COE.
- 5.5. The characterizations of information interoperability and information assurance for a capability be co-developed and co-evolved over the capability life cycle.
- 5.6. The characterization of information interoperability shall be specified in sufficient detail and be addressed within the requirements generation, resource allocation, and acquisition management processes. These processes are described in references c and e. Information interoperability characterization shall also be specified to a level of detail that supports periodic verification of a capability's information interoperability.
- 5.7. New capabilities shall be developed and deployed in a manner that promotes information sharing across the enterprise. As a minimum, information that is shared across the enterprise will be made available for presentation via a standard web browser.
- 5.8. DoD C2, Combat Support, and Intelligence capabilities supporting the Joint Task Force (JTF) and CINCs shall meet the DII COE compliance level specified by the DoD CIO, with a recommendation from DISA, the Joint Staff, and affected organizations. All other capabilities shall use DII COE components to the maximum extent necessary to meet DoD portability and security requirements, and enable information interoperability.

6. RESPONSIBILITIES

- 6.1. The DoD Chief Information Officer shall:
 - 6.1.1. Assign responsibilities and establish procedures, as necessary, to ensure that information capabilities are interoperable, as prescribed within this G&PM.
 - 6.1.2. Assign responsibilities and establish procedures, as necessary, to ensure that architectures are developed in accordance with the C4ISR Architecture Framework and rationalized and synchronized across the DoD.

- 6.1.3. Develop and maintain joint systems and technical architecture views in coordination with applicable DoD Components and Principal Staff Assistants.
- 6.1.4. Assign responsibilities for the identification, development, implementation, and provision of enterprise solutions.
- 6.1.5. Establish a primary enterprise executive agent for engineering coordination to provide, in collaboration with enterprise CIOs, overall engineering coordination of enterprise solutions; and to assure that enterprise solutions are consistent, compatible, and interoperable as described in paragraph 6.2.
- 6.1.6. Establish enterprise executive agents in collaboration with Enterprise CIOs to develop and manage enterprise solutions as described in paragraph 6.3.
- 6.1.7. Ensure the sharing of information to promote information interoperability (e.g., enterprise wide best practices and lessons learned).
- 6.1.8. Act as the responsible authority for granting waivers from the requirements of this G&PM.
- 6.1.9. Review waivers from JTA mandated standards for concurrence.
- 6.1.10. Manage Enterprise data to provide a common representation of information that enables information interoperability.
- 6.1.11. Coordinate with the IC CIO to identify and resolve information interoperability issues between DoD capabilities and the SCI systems and networks that fall under the authority of the DCI as specified in references f and g.
- 6.1.12. Identify the DII COE compliance level that DoD Command and Control, Intelligence, and Combat Support capabilities that must meet per paragraph 5.8. Grant waivers as required.

- 6.1.13. Ensure the information interoperability of information technology (IT) and national security systems (NSS) throughout the DoD (Public Law 105-261).
- 6.1.14. Ensure that IT and NSS standards that will apply throughout the DoD are prescribed (Public Law 105-261).
- 6.1.15. Provide for the elimination of duplicate IT and NSS within and between the military departments and the Defense Agencies (Public Law 105-261).
- 6.2. <u>The Primary Enterprise Executive Agent for</u> Engineering Coordination shall:
 - 6.2.1. Identify the need, implementation approach, and investment strategy for enterprise solutions, driven by requirements developed in collaboration with enterprise members.
 - 6.2.2. Support the DoD CIO in establishing enterprise executive agents for development (or selection), provisioning, management, and evolution of each enterprise solution.
 - 6.2.3. Perform systems integration of enterprise solutions.
 - 6.2.4. Establish the means for registry and publication of enterprise solutions.
 - 6.3. Designated Enterprise Executive Agents shall:
 - 6.3.1. Engineer, develop, and manage assigned enterprise solutions in coordination with enterprise members.
 - 6.3.2. Provide the primary executive agent with information necessary to integrate, register, and publish enterprise solutions, including details of how solutions are accessed and used.
 - 6.4. The Under Secretary of Defense for Acquisition and Technology shall:

- 6.4.1. Ensure, through oversight of acquisition and non-acquisition (e.g., ACTDs) programs, that the requirements of this G&PM are met.
- 6.4.2. Review waivers for JTA mandated standards for concurrence. For waivers for Modeling and Simulation related to the High Level Architecture grant waiver subject to the concurrence of the DoD CIO.
- 6.4.3. For efforts such as ACTDs, ATDs, and Modeling and Simulation, implement procedures for the use of JTA mandated standards to include compliance assurance, programming and budgeting of resources, and scheduling.
- 6.4.4. For efforts such as ACTDs, ATDs, and Modeling and Simulation, establish administrative procedures for the Component Acquisition Executive to grant waivers from the use of applicable JTA mandated standards. All waivers must be accompanied by the identification of cost, schedule and performance impacts that will occur if a waiver is not granted and acknowledgment of any resulting operational limitations.
- 6.5. The OSD Principal Staff Assistants (PSAs) shall, in their areas of functional responsibility, ensure that the policies of this G&PM are implemented.
 - 6.5.1. Implement procedures for the use of JTA mandated standards to include compliance assurance, programming and budgeting of resources, and scheduling.
 - 6.5.2. Establish administrative procedures for the Component Acquisition Executive to grant waivers from the use of applicable JTA mandated standards. These procedures shall address the submission of waivers to the USD (A&T) and DoD CIO for concurrence. All waivers must be accompanied by the identification of cost, schedule and performance impacts that will occur if a waiver is not granted and acknowledgment of any resulting operational limitations.

- 6.6. The Heads of the DoD Services, Agencies, and organizations shall:
 - 6.6.1. In coordination with the OSD PSAs, ensure that the policies of this G&PM are followed throughout the applicable capability's life cycle.
 - 6.6.2. Participate in the identification of enterprise solutions. Use the designated enterprise solutions to promote information interoperability.
 - 6.6.3. Conduct information interoperability testing to ensure compliance with this G&PM, to include capabilities developed through non-acquisition processes.
 - 6.6.4. Ensure that information that is shared across the enterprise is made available, as a minimum, for presentation via a standard web browser.
 - 6.6.5. All organizations accredited to perform DII COE segmentation and certification of mission applications, common support applications, and other segments shall forward registry information to DISA for publication and distribution across the enterprise.
 - 6.6.6. Implement procedures for the use of JTA mandated standards to include compliance assurance, programming and budgeting of resources, and scheduling.
 - 6.6.7. Establish administrative procedures for the Component Acquisition Executive to grant waivers from the use of applicable JTA mandated standards. These procedures shall address the submission of waivers to the USD(A&T) and DoD CIO for concurrence. All waivers must be accompanied by the identification of cost, schedule and performance impacts that will occur if a waiver is not granted and acknowledgment of any resulting operational limitations.
- 6.7. The CIOs of the DoD Services, Agencies, and organizations shall:

- 6.7.1. Assign responsibilities and establish procedures, as necessary, to ensure that:
 - 6.7.1.1. Information capabilities are interoperable, as prescribed within this G&PM.
 - 6.7.1.2. Architectures are developed and synchronized to promote the sharing of information across the enterprise.
- 6.7.2. Manage the component infrastructure that supports enterprise solutions.
- 6.8. The Chairman of the Joint Chiefs of Staff shall:
 - 6.8.1. Develop and maintain, in coordination with the DoD components, a Joint Operational Architecture (JOA) to support Joint Task Force (JTF) requirements.
 - 6.8.2. Rationalize and synchronize the operational architecture views to assure consistency and integratability.
 - 6.8.3. In coordination with the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, establish procedures for the development, coordination, review, and approval of information interoperability requirements.
 - 6.8.4. Develop, approve, and issue joint doctrinal concepts and associated operational procedures, and information exchange operational guidance, to achieve information interoperability of capabilities employed by U.S. military forces and, as applicable, with coalition and allied forces.
- 6.9. <u>The Director, Defense Information Systems Agency,</u> shall:
 - 6.9.1. Serve as the Executive Agent for information interoperability characterization verification for all capabilities meeting paragraph 3 criteria. Establish the processes and mechanism for carrying out the verification in coordination with the DoD CIO and Joint Staff.

- 6.9.2. Accredit organizations (e.g., Services, Agencies) to perform segmentation and certification of DII COE common support applications.
- 6.9.3. Establish and maintain a registry for mission application segments and DII COE segments certified by any accredited organization.
- 6.9.4. Motivate industry to segment applications; adopt industry best practices where practical.
- 6.9.1. Define, implement, and manage data compliance measures for DoD (i.e., a data information interoperability model similar to the DII COE I&RTS).
- 6.9.2. Evolve the DII COE to address enterprise solutions.

GNIE INTEROPERABILITY WORKING GROUP ATTENDEE LIST

Name	Organization	Telephone	Email
Arnette, Joanne	DFAS	703-607-3942	joanne.arnette@dfas.mil
Baird, Dean	SPAWAR/DISA	703-681-2341	bairdd@spawar.navy.mil
Bednar, Judy	ASD(C3I) I3	703-607-0253	bednarj@osd.pentagon.mil
Binney, CDR Bruce	SPAWAR 157-2	619-553-6260	binney@spawar.navy.mil
Blue, Linda	NCTC	202-764-0205	bluel@nctc.navy.mil
Boke, Craig	AFCIC/SYNT	703-588-6162	bokec@af.pentagon.mil
Bowser, Samuel E.	Aerospace (For NRO)	703-808-2492	samuel.e.bowser@aero.org
Boyle, WG CDR Tony	AFCIC/ITA	703-588-6179	boylet@af.pentagon.mil
Brett, Jim	NSA	301-688-9790	jbrett@romulus.ncsc.mil
Broussard, Steve	DLA-CI	703-767-2165	stephen_broussard@hq.dla.mil
Callands, Fannie	OASD C3I	703-681-2437	callandf@ncr.disa.mil
Chatfield, Jennifer	IC CIO / MITRE	703-883-7997	jchatfie@mitre.org
Driscoll, Frank	MITRE	703-883-6155	fdriscol@mitre.org
Duncan, Roger	MITRE	703-883-6244	rduncan@mitre.org
Ficklin, Susan	MITRE/DISA	703-883-6075	sficklin@mitre.org
Garza, Gilbert	CPSG/ZSS	DSN 969-2771	gilberto.garza@Lgate1.kelly.af.mil
Hagle, Terry	OASD C3I	703-607-0242	terry.hagle@osd.pentagon.mil
Hill, Bette	DLSC-IA	703-767-6564	bette_hill@hq.dla.mil
Howe, Earl	NIMA (SN)	703-264-2134	ehowe@nses.com
Howe, Earl F.	NIMA	703-264-2134	howea@nima.mil
Hybertson, Duane	MITRE - NIMA	703-883-7079	dhyberts@mitre.org
Jarvis, William	HA/TMA	703-681-8701	William.jarvis@tma.oso.mil
Jones, Don	ASD(C3I) IA	703-614-6640	donald.l.jones@osd.pentagon.mil
Knight, Barry D.	DFAS/ISO	850-452-2990	barry.knight@dfas.mil
Kraus, Marilyn	ASD(C3I) I3	703-607-0255	marilyn.kraus@osd.mil
Lelansky, Gerald	DLSC-IA	703-767-6553	gerald_lelansky@hq.dla.mil
Little, Carl	OASD C3I	703-607-0649	carl.little@osd.mil
Mabry, Roy	OSD (IPO)	703-604-1576	roy.mabry@osd.mil
Machado, John G.	Machado & Assoc. (OASD C3I)		machadoj@machadojs.com
Moulton, Rich	IC CIO	301-688-3820	rdmoult@ncsc.mi
Neeley, LtCol Louis	HQ DLA/DLSC-IP	703-767-3087	louis_neeley@hq.dla.mil
Petrie, Charles	DISC4-ARMY	703-614-0792	petriCR@hqda.army.mil
Ramirez, Janice	HQ ACC/AC2ISRC	757-764-0955	janice.ramirez@langley.af.mil
Robbins, David W.	MITRE	703-883-5276	daverobb@mitre.org
Robertson, Debi	MITRE	703-883-7155	nottingd@mitre.org
Rogers, Jeff	MITRE	703-883-7075	jsrogers@mitre.org
Schulz, Fritz	DISA/COE	703-681-2350	schulzf@ncr.disa.mil
Surer, Julie	MITRE - ESC/DIE	781-377-6809	jsurer@mitre.org
Sutton, Shel	MITRE	703-883-6677	shel@mitre.org
Thompson, David	DARPA	703-696-0097	dthompson@darpa.mil
Torezan, Ron	OASD C3I	703-604-1592	ron.torezan@osd.mil
Whittenton, John G.	MITRE/DIA-IM	202-231-4301	whittenj@dia.mil
Zavin, Jack	ASD(C3I) I3	703-607-0238	zavinj@osd.pentagon.mil